

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-155 are currently pending in the present application. Claims 1, 15, 39, 42, 46, 85, 101, 106, 107, 115, 116, 117, 119, 125, 127, 128, 132, 134, 135, 137, 142, 154, and 155 are amended by the present amendment and claims 156-161 are added. Support for the amendments and the new claims is found in the originally filed specification at least in originally filed claim 1, claim 42, paragraph 17, the title, paragraph 101, paragraphs 46,47, and 68, Figure 2, and Figure 10 of the published application. Thus, no new matter is added.

In the outstanding Office Action, claim 42 is objected to for a minor textual error; claim 15 is rejected under 35 U.S.C. § 112, second paragraph; claims 1-25, 27-57, 59-126, and 128-155 are rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Spriggs, et al. (U.S. Patent No. 6,421,571, hereafter “Spriggs”); claims 26, 58, and 127 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Spriggs in view of Leibold (U.S. Patent No. 5,818,736); and claims 46-126 and 128-155 are stated as rejected for the same reasons indicated in the rejection to claims 1-45.

Initially, Applicants note that the IDS which was filed on April 9, 2007, has not yet been acknowledged as considered. Applicants respectfully request acknowledgement of consideration of the references in that IDS by providing Applicants with an initialed Form PTO-1449 from that IDS.

With respect to the rejection of claims 46-126 and 128-155, applicants note that this range of claims includes independent claims 46, 85, 101, 107, and 115. Significantly, each of claims 46, 85, 101, 107, and 115 claims a different scope of protection. As such, each independent claim should be addressed individually and each rejection should, according to MPEP 707.07(d), state the grounds of rejection *fully and clearly*. Turning to the detailed rejection, page 14, lines 19-20 of the outstanding Office Action state “claims 46-126 and 128-155, have been considered, yet, have been rejected for the same reasons indicated in the rejections to claims 1-45.” Applicants submit that such a rejection is an omnibus rejection which should be avoided according to MPEP 707.07(d). Accordingly, applicants respectfully request any future rejections with respect to these claims and their respective dependent claims be fully and clearly stated as required by MPEP 707.07(d). Moreover, applicants respectfully submit that various of the dependent claims depending

from independent claims 46, 85, 101, 107 and 115 recite specific elements or method steps not recited, or in any manner alluded to, in any of claims 1-45. For example, each of claims 48, 49, 50, 52-57, 59-81, 85-100, 101-114, 115-155 recites particular elements not recited in any of claims 1-45. As a result, the examiner has provided no indication of any manner in which any of these claims is believed to be anticipated by or obvious over any of the cited prior art, and thus has not provided a proper basis for the rejection of any of these claims. To the extent that the examiner believes that these claims are not patentable, applicants respectfully request the examiner to provide a detailed discussion as to the manner in which the cited art reads on these claims in a non-final action.

Objection to the Drawing

While the Office Action Summary Sheet indicates that the drawings are objected to, the examiner has provided no basis for such a rejection. Applicants' attorney called and left a message for the examiner inquiring about this issue. In response to this call, the examiner left a message with applicants' attorney indicating that this indication on the Office Action Summary Sheet was a typo and that no drawing objection exists. However, if the examiner, when reviewing this matter, believes that the drawings are objectionable for some reason, applicants respectfully request the examiner to indicate such basis in the detailed section of the next paper.

Objection of Claim 42

Claim 42 has been amended as suggested by the examiner. Accordingly the grounds for the objection to claim 42 are believed to have been overcome. Therefore, it is respectfully requested that the objection to claim 42 be withdrawn. Applicants wish to thank the examiner for his careful reading of the claims and for bringing this matter to the applicants' attention.

35 USC § 112, Second Paragraph, Rejection of Claim 15

Claim 15 has been amended to recite "the selected template configuration object" as suggested by the examiner. Accordingly, the rejection of claim 15 under 35 USC § 112, second paragraph is believed to have been overcome. Therefore, it is respectfully requested that this rejection be withdrawn. Applicants wish to thank the examiner for his careful reading of the claims and for bringing this matter to the applicants' attention.

35 USC § 102 Rejections

With respect to the rejection of claims 1-25, 27-57, 59-126, and 128-155 under 35 U.S.C. § 102(b), applicants respectfully traverse this rejection for the following reasons.

As amended, claim 1 recites:

A configuration viewing system for use in a process plant having a processor and a user interface, the configuration viewing system comprising:

a computer readable memory;

a plurality of template configuration objects stored on the computer readable memory, wherein each of the plurality of template configuration objects includes a graphical representation of a physical entity within the process plant, a parameter storage adapted to communicate with the process plant to obtain and store device parameter information associated with the physical entity within the process plant and a configuration storage adapted to store configuration parameters associated with the physical entity within the process plant;

a first routine stored on the computer readable memory and adapted to be executed on the processor to present a library section on the user interface, the library section adapted to present depictions of the plurality of template configuration objects to a user via the user interface;

a second routine stored on the computer readable memory and adapted to be executed on the processor to present a configuration area on the user interface; and
a third routine stored on the computer readable memory and adapted to be executed on the processor to enable a user to select one of the plurality of template configuration objects from the library section and to place the selected template configuration object within the configuration area to create a process configuration module within the configuration area, the process configuration module associated with a portion of the process plant,

wherein the created process configuration module is *an executable object* including a *particular displayable graphical representation associated with a particular physical entity* within the process plant, *a particularly configured parameter storage which*, when executed, *communicates with the particular physical entity* within the process plant to obtain and store particular device parameter

information associated with the particular physical entity within the process plant ***and a particularly configured configuration storage which stores particular configuration parameters associated with the particular physical entity*** within the process plant.

Contrary to the examiner's apparent contention, Spriggs does not disclose the configuration viewing system of amended claim 1, as Spriggs does not disclose a system that uses a plurality of template configuration objects or a routine that uses a selected template configuration object to create a process configuration module as an executable object that includes (1) a particular graphical representation associated with a particular physical entity, (2) a particularly configured parameter storage adapted to communicate with the process plant to obtain and store particular device parameter information associated with the particular physical entity and (3) a particularly configured configuration storage which stores particular configuration parameters associated with the particular physical entity within the process plant.¹

In particular, Spriggs is specifically directed to the creation of a unified graphical user interface (GUI) that provides a synchronized, multiple view graphical interface using the architecture shown in Figure 6 of Spriggs. (Spriggs, Abstract, col. 13, lines 25-28). Importantly, Spriggs does not create, as part of its GUI structure, individual configuration modules in the form of individually executable objects, each having the three specific features recited by claim 1 (i.e., a graphical representation of a plant entity, a set of device parameters for the plant entity and a set of configuration information for the plant entity). Instead, the point of the Spriggs disclosure is to provide a single GUI that has access to various different databases which store, for example, device data collected from the plant, configuration data and graphics, to present a unified and easily understood display to the

¹ An embodiment of amended claim 1 is described in the published specification at least at paragraphs 101, et seq. Specifically, a plurality of configuration modules (objects) 39 are created as individual executable objects, wherein each of these configuration modules 39 stores the three elements now particularly identified in claim 1 for a particular process plant entity (i.e., a graphical representation of the plant entity, device parameter information for the plant entity and configuration parameter information for the plant entity). Because of the individually executable nature of each of these configuration modules 39, various different applications 32, as shown in Figure 7 of the application, may access, execute and use the configuration modules 39 for different purposes within the process plant, such as performing device maintenance activities, control activities, optimization activities, business activities, etc. wherein each of these different applications can access the same configuration module for a particular process entity for the various different purposes or uses, thus assuring that the same information is provided to each of these different applications.

user. The whole point of Spriggs is to eliminate the need for various different types of display applications typically found in process plants (all which need to be configured separately with access to slightly different data) and, instead, to use a signal integrated GUI to provide a user with all of this information. However, to provide this GUI, Spriggs discloses using a set of different databases (e.g., databases 84, 86 and 82) to store various different types of information for the various plant entities and provides the integrated GUI with access to these different databases to accumulate and display various different information about a particular plant entity on the same interface. However, while the various different information about a particular device is displayed together on the GUI, this information is stored in and accessed from different databases at different locations within the plant. Importantly, in Spriggs, the complicated GUI infrastructure as illustrated in Figure 6 of Spriggs is needed to bring all of the information for a particular process plant device together at a common location (i.e., the user interface).

The system recited by claim 1, on the other hand, creates separately executable configuration modules each of which, in one sense, operates as a tiny and distinct database that stores disparate information about a particular individual plant entity (i.e., (1) a graphical depiction of the plant entity which can be displayed in any of a number of different types of displays, (2) device information which can be used to communicate with a device within the plant to obtain and store information about the particular plant entity, such as current operational status and variables associated with the plant entity, and (3) configuration information indicating the manner in which a plant entity is set up or configured within the plant). Once created, these separate configuration modules (essentially, one for each plant entity) can be easily used and *executed* by various *different* applications to interact with the plant or to perform different functions within the plant (such as control functions, device maintenance functions, optimization function, business functions, etc.) In this manner, different applications (e.g., control applications, maintenance applications, optimization applications, and business applications) access, incorporate, and execute the same configuration modules to perform various different functions within the plant, which functions may include for example, display functions, control functions, optimization functions, etc. As an example, different applications (such as control applications, maintenance applications, optimization applications and business applications) may use the same set of configuration modules to create different types of displays for different types of users, such as operator control displays, device maintenance

displays, optimization displays or engineering displays and business information displays, all of which will look different because they are made for different purposes.

The Spriggs, system, on the other hand, produces and is only configured for a single type of display, i.e., a unified device maintenance display.² While the display of Spriggs provides various different types of device information useful for plant maintenance activities, it does so in only one manner and for only one purpose (i.e., as part of a maintenance display). Moreover, because Spriggs does not store the particular information being displayed about a particular process plant entity (i.e., graphical information, device information and configuration information) in individual executable objects, as is recited by claim 1, but instead stores this information in various different databases, the Spriggs system is not adaptable to be used to make control displays, optimization displays etc., much less to perform other types of non-display activities, such as control and optimization programming within a plant.

As a result, applicants submit that Spriggs fails to disclose the creation or use of a process configuration module as an *executable object* including (1) a ***particular displayable graphical representation associated with a particular physical entity*** within a process plant, (2) a ***particularly configured parameter storage which***, when executed, ***communicates with the particular physical entity*** within the process plant to obtain and store particular device parameter information associated with the particular physical entity within the process plant and (3) a ***particularly configured configuration storage which stores particular configuration parameters associated with the particular physical entity*** within the process plant. As a result, applicants submit that Spriggs does not anticipate amended claim 1. Therefore, applicants respectfully request that the rejection of claim 1 under 35 U.S.C. Section 102(b) as anticipated by Spriggs be withdrawn.

² Specifically, Spriggs' main application class 110 manages views and *directs* what actions can be performed on various objects.. (Spriggs, col. 13, lines 54-57) Objects will expose what type of data they contain to main 110, and main 110 will script actions on components together. (Spriggs, col. 13, lines 59-61) The configuration object 150 in Spriggs allows the user to edit configuration properties of an object from any other view in the system 10 by selecting configuration 151 as shown in Figure 10 of Spriggs. (Spriggs, col. 22, lines 13-24) The configuration object 150 of Spriggs accesses data from and provides data to the main application class 110 and not any other application as shown in Figure 6 of Spriggs as Spriggs has data about the object being viewed *stored* across its system. Specifically, in Spriggs *particular* graphical representation, *particular* device parameter information, and *particular* configuration parameters are *stored* across several different databases or modules. (See Figure 1, elements 84, 86, 100, 200, 20; Figure 3, element 202, 82; Figure 6, elements 112, 150, 134, 120, 112, 132)

Despite the omnibus rejection of claims 46-126 and 128-155 (which include independent claims 46, 85 101, 107, and 115) under 35 U.S.C. Section 102(b) as anticipated by Spriggs, applicants present individual reasons why independent claims 46, 85 101, 107, and 115 are not anticipated by Spriggs in an effort toward furthering prosecution.

With respect to independent claim 46, amended claim 46 recites, in part, a “configuration object” comprising “an executable object including a particular display graphic associated with a particular process element, a particularly configured communication interface adapted to communicate with the process plant to obtain and store particular parameter information associated with the particular process element within the process plant and a particularly configured configuration attribute storage that stores particular configuration parameters associated with the particular process element within the process plant.” As discussed above, Spriggs does not describe a process configuration module as an executable object having these specific elements. Accordingly, Spriggs fails to anticipate claim 46. Therefore, it is respectfully requested that the rejection of claim 46 under 35 U.S.C. Section 102(b) as anticipated by Spriggs be withdrawn.

With respect to independent claim 85, claim 85 recites, in part, an “integrated configuration system” comprising “a configuration application stored in the memory and adapted to be executed on one of the processors to create a process configuration module” “wherein the process configuration module is an executable object including a particular graphical representation associated with a particular physical entity, a particularly configured parameter storage adapted to communicate with the process plant to obtain and store particular device parameter information associated with the particular physical entity within the process plant and a particularly configured configuration storage that stores particular configuration parameters associated with the particular physical entity within the process plant.” As discussed above, Spriggs does not describe a process configuration module as an executable object having these particular elements. Accordingly, Spriggs fails to anticipate claim 85. Applicants therefore respectfully request that the rejection of claim 85 under 35 U.S.C. Section 102(b) as anticipated by Spriggs be withdrawn.

With respect to independent claim 101, claim 101 recites, in part, an “integrated configuration system” comprising “a configuration routine stored on the computer readable memory and adapted to be executed on a processor, wherein the configuration

routine creates a process configuration module for an entity associated with the process plant using one or more configuration objects, wherein each configuration object is an executable object including a particular graphical representation associated with a particular sub-entity associated with the entity, a particularly configured parameter storage adapted to communicate with the process plant to obtain and store particular device parameter information associated with the particular sub-entity associated with the entity and a particularly configured configuration storage that stores particular configuration parameters associated with the particular sub-entity associated with the entity, and wherein the process configuration module is communicatively coupled to an entity associated with the process plant.” As discussed above, Spriggs does not describe a process configuration module as an executable object having these particular elements. Accordingly, Spriggs fails to anticipate claim 101. Applicants therefore respectfully request that the rejection of claim 101 under 35 U.S.C. Section 102(b) as anticipated by Spriggs be withdrawn.

With respect to independent claim 107, claim 107 recites, in part, a method comprising “creating a process configuration module by interconnecting one or more configuration objects, wherein each of the configuration objects is an executable object including a particular graphical representation associated with a particular physical entity within the process plant, a particular parameter storage adapted to communicate with the process plant to obtain and store particular device parameter information associated with the particular physical entity within the process plant and a particular configuration storage adapted to store particular configuration parameters associated with the particular physical entity within the process plant, wherein the process configuration module is communicatively coupled to an entity associated with the process plant that includes each of the particular physical entities associated with each of the one or more configuration objects.” As discussed above, Spriggs does not describe a process configuration module that is made up of one or more executable objects including a particular elements specified in this claim, nor a method of creating or using such a process configuration module. Accordingly, Spriggs fails to anticipate claim 107 and applicants respectfully request that the rejection of claim 107 under 35 U.S.C. Section 102(b) as anticipated by Spriggs be withdrawn.

With respect to independent claim 115, claim 115 recites, in part, a method comprising “enabling a user to create a process configuration module” “wherein the

created process configuration module is associated with a particular entity within the process, and is an executable object including a particular graphical representation associated with a particular entity, a particular parameter storage adapted to communicate with devices within the process to obtain and store device parameter information associated with the particular entity within the process and a particular configuration storage adapted to store configuration parameter information associated with the particular entity within the process.” As discussed above, Spriggs does not disclose a process configuration module as an executable object including a the specific elements recited therein and thus does not disclose a method of enabling a user to create such a process configuration module. Accordingly, Spriggs fails to anticipate claim 115 and applicants therefore, respectfully request that the rejection of claim 115 under 35 U.S.C. Section 102(b) as anticipated by Spriggs be withdrawn.

35 USC § 103 Rejections

Applicants respectfully traverse the rejection of claims 26, 58, and 127 under 35 U.S.C. Section 103(a) as unpatentable over Spriggs in view of Leibold. As claims 26, 58, and 127 are dependent claims based on claims 1, 46, and 115, respectively, and as discussed above, claims 1, 46, and 115 are believed to be allowable, claims 26, 58, and 127 are at least allowable for the same reasons as their respective independent claims. Further, it is respectfully submitted that Leibold is directed to testing a system via simulating signal flow through a logic block diagram and does not discuss a process configuration module of any sort. Accordingly, Leibold does not describe the features identified as being deficient in Spriggs.

As a result, applicants respectfully request that the rejection of claim 26, 58 , and 127 under 35 U.S.C. Section 103(a) over Spriggs in view of Leibold be withdrawn.

New Claims 156-161

Applicants submit that new claims 156-161 further define the created process configuration module as “adapted to provide, to a plurality of applications,” “the particular displayable graphical representation” or “ the particular display graphic,” or “the particular device parameter information,” or “the particular configuration parameters.” An embodiment of this feature is described in the published specification at paragraph 101. Specifically, a plurality of applications 32, as shown in Figure 7 of the published

application, may access data from and provide data to the process configuration modules 39. Applications such as maintenance system applications 200, optimizer applications 202, expert system or predictive control applications 204, and equipment monitoring applications 206, as well as any desired business applications 208 are communicatively coupled to the process configuration modules 39. (Published application at title, paragraph 101, Figure 10)

Whereas, Spriggs is directed to a synchronized multiple view graphical interface which has the object architecture shown in Figure 6 of Spriggs. (Spriggs, Abstract, col. 13, lines 25-28) Specifically, Spriggs's main application class 110 manages views and *directs* what actions can be performed on various objects. (Spriggs, col. 13, lines 54-57) Objects will expose what type of data they contain *to* main 110, and main 110 will script actions on components together. (Spriggs, col. 13, lines 59-61) The configuration object 150 in Spriggs allows the user to edit configuration properties of an object from any other view in the system 10 by selecting configuration 151 as shown in Figure 10 of Spriggs. (Spriggs, col. 22, lines 13-24) The configuration object 150 of Spriggs accesses data from and provides data to the main application class 110 and not any other application as shown in Figure 6 of Spriggs.

With respect to Liebold, Liebold is directed to testing a system that simulates signal flow through a logic block diagram and does not discuss configuration or a process configuration module. (Liebold, Abstract)

Accordingly, Spriggs and Liebold do not describe the feature included in new claims 156-161. Thus, new claims 156-161 are believed to be patentable.

Conclusion

Consequently, in view of foregoing discussion and present amendment, applicants respectfully submit that this application is in condition for allowance. An early and favorable action is therefore respectfully requested. If there are matters that can be discussed by telephone to further the prosecution of this application, applicants respectfully request that the examiner call its attorneys at the number listed below.

Respectfully submitted,



/Milena Sukovic/

Roger A. Heppermann
Reg. No. 37,641
Milena Sukovic
Reg. No. 60,532
MARSHALL, GERSTEIN & BORUN LLP
6300 Sears Tower
233 South Wacker Drive
Chicago, Illinois 60606-6402
(312) 474-6300 (phone)
(312) 474-0448 (fax)

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